

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

- 1           1 (original): A method for measuring a physiological parameter, comprising:
  - 2                 measuring a plurality of signals, wherein each of said signals comprises a source
  - 3                 component corresponding to said physiological parameter and an interference component;
  - 4                 processing said plurality of signals to obtain a plurality of principal components;
  - 5                 processing said plurality of principal components to obtain a plurality of
  - 6                 independent components, wherein a matrix of said plurality of signals corresponds to a matrix
  - 7                 product of a matrix of said plurality of independent components and a matrix of mixing
  - 8                 coefficients; and
  - 9                 extracting a first measure of said physiological parameter corresponding to said
  - 10               source component from one of said plurality of independent components.

Claims 2-40 (canceled)